

Books

AD/CYCLE: IBM's Framework for Application Development and CASE, Stephen L. Montgomery, Van Nostrand Reinhold, New York, 1991. 252 pp. (ISBN 0-442-30825-6).

IBM's AD/Cycle* announcement of 1989 had several immediate effects: it legitimized computer-aided software engineering (CASE) in the eyes of the I/S community; it detailed a blueprint that I/S organizations could follow in achieving CASE benefits; and, it catapulted IBM to a position of leadership in this area. In short, AD/Cycle promised to transform the manner in which business computer applications have been developed for the past 30 years.

Stephen Montgomery's book provides a complete overview of AD/Cycle. It offers a high-level view of a complex topic, condensed into a single volume. While the author states that the intended audience is I/S management, nearly anyone employed in business computing will find this introduction helpful. In fact, given the critical importance of IBM's AD/Cycle to both IBM's fortunes and the I/S community at large, systems analysts, programmers, corporate planners, and the rest of the I/S profession would be well-advised to take advantage of Montgomery's overview.

Chapter 1 of this book presents a justification of why application development must be automated. It discusses the defects of traditional approaches to applications development, places them within a historical context, describes how CASE addresses the traditional problems in application development, and explains the roles of models within CASE. Chapter 2 continues with an overview of Systems Application Architecture* (SAA*), thereby presenting the kinds of applications and standards that AD/Cycle is intended to support.

Chapter 3 details the AD/Cycle framework. It describes the various phases of application develop-

ment, how AD/Cycle supports them, and the role of the AD Platform and the Information Model.

Chapter 4 covers "Planning for the Strategic Use of Information Systems." It argues that information systems are strategic to today's businesses and that they lead directly to competitive advantage. It then tells how information systems planning can be linked directly to business plans. The next chapter continues this explanation by concentrating on enterprise modeling.

Chapter 6 gets into the more traditional CASE domain of analysis techniques. It defines data modeling, process decomposition, data flow diagramming, and data structure modeling within the AD/Cycle context. Chapter 7 completes the discussion. Together, these chapters go a long way toward helping I/S managers—whose technical experience may predate CASE techniques—understand how the AD/Cycle framework of Chapter 3 is embodied within specific CASE techniques.

Chapter 8 describes AD/Cycle programming languages, application generators, and knowledge-based systems, while Chapter 9 discusses application testing and the specific tools, Workstation Interactive Test Tool (WITT) and Software Analysis Test Tool (SATT). The next chapter completes this triad with a description of the project management components of AD/Cycle.

The final two chapters describe how to get started with AD/Cycle, and provide the author's vision of how AD/Cycle might develop over time. A lengthy appendix follows, which lists and describes AD/Cycle tools today. This material is wisely placed in an appendix due to the rapid changes expected in this area.

This AD/Cycle book provides a valuable service in consolidating, prioritizing, and explaining the

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vast sweep of concepts and tools that compose this critical IBM vision. It is immeasurably more time-efficient for the I/S manager, programmer, or analyst to read this book, than to try to piece together equivalent information from the plethora of IBM manuals on this topic.

Beyond this, author Montgomery offers useful insights from his own CASE background on the meaning and utility of AD/Cycle approaches. One senses a degree of restraint in this book, an attempt to be objective in describing AD/Cycle, when in fact, the author's opinions and views are one of its primary benefits. Given that the author is an IBM employee, this surprised me somewhat. Other than a page or two describing IBM consulting services for AD/Cycle, this book really has no bias and is certainly not an attempt to market IBM products. Montgomery's book on AD/Cycle is recommended as a great place to start understanding and evaluating IBM's wide-ranging and ever-changing AD/Cycle.

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